wars, as the distinguished and able chairman of the Committee on Armed Services.

When we are calling on experts to testify, I would place in the category of the foremost experts the distinguished chairman of the Armed Services Committee, the Senator from Georgia [Mr. RUSSELL], because for more than a decade legislation relating to our Armed Forces, types of weapons, various branches of the service, personnel, and classified information have all crossed the Senator's desk. He is well qualified to speak on these matters. I hope the Senate will give great weight to the position he has stated.

Mr. RUSSELL. I thank the Senator. I would that I might deserve the high encomium he has paid to me.

Mr. COOPER. Mr. President, will the Senator yield?

Mr. RUSSELL. I yield to the Senator from Kentucky.

Mr. COOPER. I value very much having heard the Senator from Georgia this afternoon, as I always do, and particularly on any subject that affects the national security.

One of the great privileges I have had, not being a member of the Armed Services Committee, has been that of attending many times the executive sessions of the committee, of which the Senator is the chairman. This has given me the opportunity to learn more about our very complex systems of defense.

I agree with the premise the Senator from Georgia has stated, that whatever the political advantages resulting from its ratification may be—and I think they would be considerable—yet, so far as I am concerned, I think it is our first duty to assure ourselves that the treaty would not adversely affect the security of this Nation. I believe that is the opinion of the Senator from Georgia.

Mr. RUSSELL. It is. I thank the Senator and appreciate his compliments. We always welcome him into the Armed Services Committee, because he has an interest in all phases of problems that affect the security of the country.

Mr. COOPER. I assume the Senator bases his assessment of risks of the treaty to our security on its effect on our nuclear capability, either present or future.

Mr. RUSSELL. In the present state of affairs of nations, we must depend on our nuclear capability. I hope that we might be able, sometime in the future, to get a fair treaty that would safely allow our doing away with nuclear weapons. I am anxious as anyone else to avoid the nightmare that we must live with, both in our sleeping hours and waking hours, of nuclear war that might eliminate the human family from the globe. I am as eager as anyone else to do that; but we have gone further than any people have ever done to give away the advantages we held at the time we had a monopoly in nuclear weapons. We could have issued ultimatums right and left to any country, and it would have had to accede to the ultimatums.

We have shown tolerance and a desire for peace, and a desire that all peoples should control their own affairs, to an extent that has never been approached before by any country in the history of mankind, so far as my knowledge goes. I am willing to do away with nuclear weapons, but I must have a guarantee that other nations will do the same.

Mr. COOPER. I wish to ask the Senator in what areas does he consider the treaty as having an effect on our security? Does he believe that if the Soviet Union should engage in clandestine tests we would not be able to detect the tests?

Mr. RUSSELL. It is wholly possible, because Secretary McNamara testified before the committee, and this testimony was all received under oath—not that he would not have testified exactly the same if he had not been under oath—and it is generally agreed by the scientists that there is a belt from 6 to 30 miles in the atmosphere where our present methods of detection are wholly inadequate.

The electromagnetic instrument does not function in that area. The very fact that the Chiefs of Staff, who live with this problem 24 hours a day—and some of us live with it for about 20 hours—insisted on improving our method of detection before they would approve the treaty, shows that they are not complete.

Mr. COOPER. Is it not correct to say that the scientists have testified that any extensive tests by the Soviet Union would be detected?

Mr. RUSSELL. There is no question about it. Any extensive test above 30 miles in the atmosphere is almost certain of detection. We have two methods, and both of them pinpoint the explosion. When one gets above 30 miles, or stays on the surface of the earth, it is possible to detect the explosion.

Mr. COOPER. Would the Senator consider that the risk of any advances that the Soviet Union could make from underground testing would be offset by the advances that we would make in underground testing?

Mr. RUSSELL. No; because there is a definite limitation on size in underground testing. We have had one since the test ban treaty has been pending. It was a relatively low yield explosion, but it shook the windows in the city of Las Vegas, which is many miles away. The Senator from Tennessee knows exactly how far away it is. Perhaps he can tell us how far the test area is from Las Vegas.

Mr. GORE. It is in the neighborhood of 140 miles.

Mr. RUSSELL. That was my impression. There is a definite limit on such testing. The machines that are used in the testing are different, too, from those used in atmospheric testing.

Mr. COOPER. Would not the Senator agree, in evaluating another risk, that has been argued, that if the Soviet Union should break the treaty and resume testing, it would not take them as long to resume testing as it would take the United States?

Mr. RUSSELL. It all depends on the state of readiness. The Soviet Union, in 1961, covertly and secretly made the most extensive and exhaustive preparations for the resumption of testing, but we knew nothing about those preparations. They notified us on August 30 that they would start testing again. On September 1 they made their first test. That caught us off balance. We then started to prepare to resume our own testing, and we finally did resume testing. We did not plan the tests as adequately as we should have.

It is one of the safeguards the Joint Chiefs of Staff sought to have included before they would say the treaty was consistent with our security. It is one of the safeguards that have been given, and one that I am sure the administration intends to follow, to undertake preparations for testing. In the past we have not made out well on the resumption of testing because the Russians would notify us one day and start testing the next.

Mr. COOPER. I have one more question to ask. My purpose is to inquire about the specific risks that have been stated. I believe the chief point of concern of the Senator is that the Soviets have acquired information, through recent tests and from past tests, which we do not possess, relative to an antiballistic missile system, and radar and communications blackout and reentry. I call to the attention of the Senator the testimony of Dr. Brown, at page 530 of the hearings—I mentioned this the other day—where he makes the categorical statement that the tests have been comparable. His statement is:

> With respect to high altitude tests carried out for the purpose of determining the effects of nuclear bursts on communications blackout, radar blackout, and nuclear weapons vulnerability, Soviet and U.S. experience appear to be comparable.

Is that the Senator's view?

Mr. RUSSELL. I do not believe the Senator was in the Chamber during the whole of my statement. I said at one point that this matter was in a classified area which I could not go into. This deals with the results of blackouts. The result from one of our own explosions was wholly unexpected. It was something our own scientists could not explain. If the Senator will go to the executive, classified record of the testimony of both Dr. Brown and Mr. McCone, who is the head of the Intelligence Agency but who at that time was Chairman of the Atomic Energy Commission, he will find the extent and the nature of the tests the Russians conducted, and some of the effects of those tests, as well as one that we conducted, and its effect. They are matters of high classification.

Mr. COOPER. I have read some of the testimony. I appreciate the Senator's responses to my questions.

Mr. FULBRIGHT. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. FULBRIGHT. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. PASTORE. Mr. President, before the Senator from South Carolina leaves the Chamber, I should like to make a brief observation on the colloquy between him and the Senator from Georgia, which I believe leaves a rather unfortunate implication. The implication is that possibly the members of the Joint Chiefs of Staff were ordered or induced or persuaded or compelled against their best judgments to reach a conclusion with regard to the treaty.

In that connection I should like the RECORD to show that at page 349 of the hearings there appears, close to the bottom of that page, under the title "No Pressure Exerted on Chiefs To Approve Treaty," the following questions by the Senator from Georgia [Mr. RUSSELL]:

For the record, General LeMay, was any pressure put on you to join with the other Joint Chiefs in approving this treaty with these safeguards?

General LEMAY. No, sir.

Senator RUSSELL. General Wheeler?

General WHEELER. No, sir.

Senator RUSSELL. Admiral McDonald?

Admiral MCDONALD. No, sir.

Senator RUSSELL. General Shoup?

General SHOUP. No, sir.

I hope that that will allay the fears or doubts of any Senator who thinks for a moment that any decision that was reached by the members of the Joint Chiefs of Staff with respect to the treaty was influenced in any way by the Chief Executive or anyone else. If I may paraphrase substantially what General LeMay said at one point, it was, "I would resent such pressure, even an attempt, being exerted upon me."

Mr. President, I am particularly proud to speak on behalf of the treaty before the Senate. I have never been prouder of the Senate than I have been during these days of discussion. Able speakers—gifted, dedicated, sincere—have honestly stated their positions. A common love of America commands them all.

No petty, no partisan, no parochial prejudice colors their view of what is best for America as each is privileged to see it. And I am sure that each sees America in the larger framework of humanity: in the dimensions of America's power, prestige, and responsibilities in a world that has been made so small by the science of man; a world made so fearful by man's science; a world brought closer by its common fears.

Out of these common fears has come the treaty to which more than 90 nations are already signatory.

But all the billions of the world's people look to Washington—and listen—to learn what our decision as Senators will be. For no matter how many nations might sign the treaty, it is but a scrap of paper without the acceptance of the United States. That acceptance cannot be achieved without ratification of the treaty by the Senate.

So the hearts of the world reach out to Washington—and to the Senate—with hope.

Yes, the world is our audience; but in the lonely chamber of his conscience each Senator weighs his responsibilities and indeed votes his conscience.

In the area of America's nuclear power this Senate has placed upon some Senators a special responsibility that goes with their opportunity for special knowledge. Among others, such a responsibility is vested in the Joint Committee on Atomic Energy. As a member through the years—and presently chairman—I have tried to accept and discharge that responsibility to my country and to my conscience.

I support the treaty, which I consider is the first step toward what we hope will be a peaceful future. I support this treaty, which is the culmination of efforts by three administrations to obtain some type of international control over the destructive power of the atom. We have worked for it for almost two decades.

BACKGROUND

The ashes had not long settled in Hiroshima and Nagasaki when President Truman attempted to obtain international control over atomic information and material. President Truman recognized the uncertain future of a world in which the destructive power of atomic energy would exist in the possession of individual national powers if it were unchecked and uncontrolled. The Baruch plan of 1946 was an unsuccessful attempt to create an Atomic Development Authority within the United Nations to which the United States would have transferred its monopoly of nuclear material and information. It was the first of our many efforts to obtain some international restriction on the destructive forces that had come into the possession of mankind.

President Eisenhower, who bore the responsibility for millions of American lives during World War II, who well knew the ravages of war, and who had seen whole cities destroyed and countrysides laid waste, most earnestly attempted throughout his administration to reach agreement on the cessation of nuclear weapon testing.

President Eisenhower continuously and conscientiously devoted his energies to exploring methods for obtaining agreement with the Soviet Union to control the atom. Under his leadership, some headway was made. Agreements were signed between the United States and the Soviet Union for the exchange of scientific information on peaceful uses of the atom and for reciprocal visits of nuclear scientists to each country. A treaty was entered into by the United States, the Soviet Union, and other nations, prohibiting the dumping of atomic waste material in the Antarctic. The International Atomic Energy Agency was established to further the peaceful uses of atomic energy and to develop safeguard procedures to insure that nuclear material is not diverted into military purposes.

In the summer of 1958, under President Eisenhower, experts of the United States, England, and the Soviet Union met in Geneva to evolve scientific methods of detecting and identifying nuclear explosions as a basis for any possible agreement which might be reached by the nuclear powers.

Based upon the results of the conference of experts and in response to a proposal of President Eisenhower, the United States, the United Kingdom, and the Soviet Union, beginning in October 1958, entered into the Conference on the Discontinuance of Nuclear Weapon Testing. That conference was to continue for more than 3 years, to consist of over 350 meetings, and to extend into President Kennedy's administration. Over 100 additional meetings on a nuclear test ban were conducted within the 18-nation disarmament conference. These conferences absorbed the energies and minds of such capable men as Mr. James J. Wadsworth, Mr. Arthur Dean, Mr. John McCloy, and Mr. Charles Stelle.

The treaty before us today represents the best efforts of these and many other patriotic Americans who gave untiringly of their energies during three administrations of our Government. It is not an agreement hastily drawn or little thought out. Rather, it is the result of many thousands of hours of negotiation and exploration between the scientists and diplomats of the United States and the United Kingdom on the one hand and representatives of the Soviet Union on the other. It is the distillation of many years of conscientious effort by men dedicated to solving the most dangerous problem facing our world today—the threat of nuclear destruction.

In the library of the Joint Committee on Atomic Energy are bound volumes of the minutes of these conferences, running into thousands of pages. They amply reflect the minute detail covered during the negotiations.

EXPLANATION OF TREATY

As clearly pointed out by others, the treaty banning nuclear tests in the atmosphere, in outer space, and underwater is not a treaty that will prevent nuclear war.

It is not a treaty that will prevent the present nuclear powers from continuing to add increasing numbers of nuclear weapons to the existing tens of thousands already in stockpile.

It is not a treaty that will prevent the major powers of the world from continuing to develop and test more efficient and larger delivery systems to transport the massive destructive forces of existing nuclear weapons to the civilian population centers of the world.

It is not a treaty that prohibits all nuclear tests.

As President Kennedy has stated:

This treaty is not the millenium, but it is an important first step—a step toward peace, a step toward reason, a step away from war.

For too many years now the world has watched apprehensively as the nuclear powers have vied with each other in testing larger and more efficient nuclear weapons.

The tremendous force of the early atomic bombs was surpassed by the horrendous force of the hydrogen bomb. More easily deliverable, larger, and more powerful hydrogen bombs have followed, the testing of which forced radioactive material into the atmosphere.

The world has long awaited some movement toward control of the military atom. A wondering world seeks some indication that the nuclear powers can reach agreement in the military fields

Dr. York gave us some very simple testimony as to the impact of science and technology on national security. Every Member of this body should read that testimony. Dr. York came to us as a very competent witness, both in the field of weapons and in the field of basic science.

Dr. George B. Kistiakowsky, former Special Assistant for Science and Technology to President Eisenhower said:

Confronted with the opportunity to choose between, on the one hand, some rather small specific technical risks in ratifying the treaty, and on the other, some perhaps comparable or greater technical risks in continued unrestricted testing plus the general risks of a continued arms race which, at least, might be somewhat slowed by ratification, I hope the Senate would opt for what I regard as by far the smaller total risk and will ratify the treaty.

Finally, Mr. John McCone, Director of the Central Intelligence Agency, whose testimony could not be printed in the hearings also advocated ratification of the treaty, without qualification.

Mr. PASTORE. Mr. President, will the Senator yield on that point?

Mr. HUMPHREY. I yield.

Mr. PASTORE. I think the RECORD should indicate an additional fact in this connection. If Senators do not already know it, Mr. John McCone was appointed Chairman of the Atomic Energy Commission during the administration of President Eisenhower. To indicate what a cautious, deliberate, judicious man he is, Mr. John McCone, for 6 months after he was appointed, never uttered one word of testimony before our committee. He cautioned our committee that he would not open his mouth on any subject until he had had an opportunity to learn, through intense homework, what were his responsibilities. He turned out to be one of the most efficient and best Chairmen ever of that Commission. He served under the Republican President. Later, when President Eisenhower retired from public life, Mr. McCone retired from the Atomic Energy Commission. Since that time he has been appointed by the President of the United States to be the head of the Central Intelligence Agency. He is in a better position than any other individual in this country to know central intelligence which affects the treaty.

Mr. HUMPHREY. The Senator has properly and helpfully pointed out that Mr. McCone, who has had long experience as Chairman of the Atomic Energy Commission and is now the experienced director of the Central Intelligence Agency. He is in a position to relate intelligence information to nuclear information better than most men could. He is knowledgeable in the field of atomic energy as well as the field of nuclear weaponry and, as director of the Central Intelligence Agency, obtains considerable information as to what other countries—and particularly the Soviet Union—are doing in this very important area of weapons.

Mr. MILLER. Mr. President, will the Senator yield?

Mr. HUMPHREY. I am pleased to yield.

Mr. MILLER. I noted that the Senator quoted Dr. York as saying that under this treaty the arms race might be slowed down. As I recall, no witness testified that the race would be slowed down. I believe there was some testimony to the effect that the treaty might well cause the race to be stepped up, because, while nuclear testing in the atmosphere would stop, the more expensive underground testing would continue, and probably be stepped up in degree.

As I understand the situation, one of the reservations or conditions of the Joint Chiefs of Staff is that we would actually have a stepped up underground nuclear testing program. I believe the Atomic Energy Commission and the Defense Department have indicated that they would abide by that condition.

I make this point because, as the Senator knows, I have not indicated how I shall vote. I have not made up my mind as to how I shall vote in regard to the treaty. If I vote for ratification it will definitely not be because I am persuaded that the arms race will be slowed down by the treaty. I would vote for it probably with the feeling that the arms race might be stepped up as a result of the treaty. I think it is well to point that out.

If there is some response which the Senator might care to give, to alleviate my concern in this regard, I should like to hear it. I have not yet seen anything which indicates to me that there will not be an acceleration in the arms race as a result of the conditions laid down by the Joint Chiefs of Staff and as a result of the agreement by the Department of Defense and the Atomic Energy Commission to carry out those conditions.

Mr. HUMPHREY. The statement of Dr. York is a statement by a man who is prudent and cautious, and who fully understands the implications of nuclear power and nuclear weaponry. He worked for two administrations as a trusted adviser of President Eisenhower and of President Kennedy. This man will not tell the American people that "positively this will happen—absolutely it will reduce the arms race." He is saying to us—as a prudent, wise, and experienced man—that the treaty has within it the possibilities of reducing the arms race. I think that is the way we ought to deal with the treaty. I do not believe that dogmatic assertions will enlighten the American people or do honor and justice to a thorough and thoughtful consideration of the treaty by the Senate.

Mr. PASTORE. Mr. President, will the Senator yield?

Mr. HUMPHREY. I yield to the Senator from Rhode Island.

Mr. PASTORE. The Senator from Iowa [Mr. MILLER] is both correct and incorrect. There is a distinction to be made between an arms race, such as we are discussing, and an increase in expenditures for armaments because it is more expensive to test underground. Everyone knows that if we should test any weapon of more than 5 kilotons, it is much easier to do so in the atmosphere than underground. First, for underground testing, it is necessary to build tunnels. It is harder to provide the trajectories desired. It is harder to reach the information which is desired. It is harder to install the sensitive instruments which are necessary to obtain readings underground. If the test is conducted in the atmosphere, the results are much simpler of attainment, and it is much easier to accomplish what is desired.

The point we are making—and I think the Senator from Minnesota is absolutely correct in this regard—is that if this "madness" is allowed to go unchecked, if we allow nation after nation to aspire to become a member of the nuclear club—and today it is not as expensive as it used to be to make a bomb—we face the risk of a terrible nuclear war.

If Senators will talk to Dr. Brown, I feel sure that Dr. Brown will tell them that today almost any industrialized nation can make an atomic bomb, if it wishes to do so.

The purpose of the treaty is to allow all nations of the world to become partners to it. The minute those nations become partners to the treaty, and they agree not to test in the three environments, we hope to accomplish a slowdown in the proliferation of atomic weapons. That is what we are discussing when we talk about slowing down the nuclear arms race.

For the next 2 or 3 or 5 years it may be necessary for us to appropriate more money for the Atomic Energy Commission, because it will be more expensive to maintain laboratories.

It will be more expensive to maintain Johnston Island in complete readiness, in case it is necessary to use it. It will cost more money to do the testing we wish to do underground. The budget may be larger, but I think it can be safely said on the floor of the Senate that the philosophy behind the treaty is to reduce the nuclear arms race in the hope that other countries will become signatories to the treaty and will not get into the nuclear club.

Mr. MILLER. Mr. President, will the Senator yield?

Mr. HUMPHREY. I yield.

Mr. MILLER. I should like to respond to the Senator's statement.

I believe that the most violent opponent of the treaty recognizes—and of course I recognize it full well—that the purpose of the treaty is exactly as the Senator from Rhode Island has stated it. There is more to the treaty than the treaty itself. We now must consider the conditions which were prescribed by the Joint Chiefs of Staff. These cast a different light on the treaty, in my judgment, because the Joint Chiefs of Staff have said, among other things:

We are not going to believe that this treaty is compatible with our national security interests unless the United States engages in a large-scale underground testing program.

That will be a program larger, in my judgment, than the program we would otherwise have. If anything, this will lead to a stepup in the arms race so far as we are concerned.

shoulders of each of us who today has the responsibility of voting on this treaty. Heavy responsibilities lay on the shoulders of the President, the Secretary of Defense, on military commanders, and on our Strategic Air Command personnel.

Those were sober days also for Mr. Khrushchev, his advisers, and his military personnel. We remained resolute and fortunately for the world—both the Communist and the free world—reason prevailed.

Why are the leaders of the Soviet Union willing today to enter into a limited test ban treaty which they repeatedly rejected in the past? Many factors may enter into their decision. I suggest that one factor will be the sober reflections resulting from last October. They, as well as we, have come close to the abyss. They, as well as we, have much to lose and nothing to gain by all-out nuclear war. They, as well as we, have reason to prevent nuclear war.

Let no one doubt that the Soviet leaders were affected by their mad step toward the edge of darkness in Cuba.

In a letter of July 13, from the Central Committee of the Communist Party of the Soviet Union to all party organizations, the Soviet leaders show the dramatic scars of their confrontation with the United States last October. Listen to their own words:

> The atomic bomb does not distinguish between the imperialists and working people * * * the atomic bomb does not adhere to the class principle—it destroys everyone within range of its devastating force * * * never before did mankind come so close to the brink of a thermonuclear war as it did in October of last year.

That is what they say.

This July 13 letter of the Central Committee crystalizes the sharp difference between the Chinese and the Russians. In the years to come, it will be recognized, I believe, as a key document in the history of communism. It will be reviewed and cited by historians for its insight into and the rationale of the break between the two Communist states.

As I stated before, this treaty represents a first step—a cautious step. For the last two decades we have been unable to reach satisfactory disarmament agreements, although we have consistently tried in good faith. While it has been discouraging, disheartening, and frustrating, we can be thankful that we have not engaged in nuclear war.

We must remain strong. As I have already pointed out, we must not permit our guard to be let down. The President, the Secretary of State, the Secretary of Defense, the Chairman of the Atomic Energy Commission, each individually has assured us that they will support a vigorous underground testing program, and will maintain our atmospheric testing capabilities in a high state of readiness. They have also assured us that efforts will be made to improve our test detection capabilities so that in the event of a violation we will be in a position to ascertain the fact and take immediate steps. As chairman of the Joint Committee on Atomic Energy, I can assure my colleagues that the Joint Committee intends to keep fully abreast of these matters in the interests of the United States and the free world.

On Friday, September 13, the United States conducted two underground tests at Nevada, as permitted under this treaty. A representative of the Joint Committee staff was present at the test site and has personally reported his observations to me this morning.

While we continue to remain strong, we likewise must continue to explore for means of disarmament.

The next two decades will be crucial. What will we bequeath to our children? Will it be a civilization in which medical advances will make possible longer and healthier lives, in which starvation will disappear, in which the heavy burdens of manual labor will be lifted from man leaving him ample leisure time to enjoy the benefits of life?

Will it be civilization or annihilation—destroyed cities; millions of dead; untold maimed and crippled?

We have had reports from experts to the effect that, in the event of a surprise attack, it could mean 35 million American lives. It could mean 50 or 75 million Russian lives. We are discussing an atomic attack that would result in the loss of millions of lives.

Will our children survive? If so, will we leave to them and their children the ashes of our civilization, the radioactive pollution resulting from the fallout of a nuclear war? These, then, are the alternatives that will be facing us in the next two decades.

And now, after weeks of deliberation and debate, the great constitutional drama is about to reach its decisive moment. Whether this treaty is more advantageous to the Soviet Union or to the United States no one can say with certainty.

Naturally, there are uncertainties involved. We may not know with definite certainty everything the Russians know, or what they may have achieved, although we have methods and means to keep us pretty well informed.

After all, we can gage what they might have done by what we are able to do. We know that if we have scientific problems, they must have them, too. They have a closed society, and no one can stand on the floor of the Senate and say precisely what they have. I hope no Russian can stand in his Presidium and say with certainty what we have. There are many Senators who do not know what we have. Naturally, there are imponderables, and there are risks to be weighed. But what we do know is that the responsible representatives of our Government have assured us that the balance of power is in our favor. Every man has a right to reach his own conclusion. After all, who are our best-informed people? Who is the best-informed man in the United States? If he does not know what is going on in his Government, he should not occupy the White House. He has at his disposal, at his command, any available information he desires. There are no restrictions upon him. He does not need a Q clearance. He is the President of the United States. He is the head of our Government. He is the Commander in Chief. He has made it his business to find out. He knows. If Senators are not satisfied with one President—let us add President Eisenhower. Did he not know, as President? I realize that a Senator can reach his own conclusion, but where does one go when he looks for authority? One goes to the best-informed source. If one cannot go there, he is lost.

The President of the United States, the Secretary of State, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, the members of the Joint Chiefs of Staff, and the Director of the Central Intelligence Agency, Mr. McCone, whom I have known for many years as one of the most illustrious and best informed men who has ever headed the Atomic Energy Commission, all are in favor of the treaty. Mr. McCone told our committee—I see in the Chamber my distinguished predecessor, the Senator from New Mexico [Mr. ANDERSON], who will bear me out—that Mr. McCone would not utter a word before our committee until he had done his homework, and that only then would he open his mouth before our committee. That is how cautious he is.

Then there is the current Chairman of the Atomic Energy Commission, Dr. Glenn T. Seaborg. Who is he? He is a Nobel Prize winner. He merely discovered the element plutonium. If we did not have plutonium, we would not have the nuclear weapons we have today. I will let Senators in on a fact. Dr. Seaborg is in favor of the treaty. Is he alone? No; there are five members of the Atomic Energy Commission, and all five of them are in favor of the treaty.

Military might is an important subject. We talk about military power and who has it; the balance of terror, and the balance of power. If I asked the question once, I am sure my good friend from Arkansas will bear me out when I say that I asked every responsible witness the same question. The question was: "Would you say the balance of power is in our favor or in the favor of the Russians?" Every one of them said the balance of power is in favor of the United States.

If we cannot rely upon those men, where can we go for our information? If we cannot rely on them, where can we go for advice and counsel? Where can we go for help in this crucial hour?

Some have the idea that if the treaty is rejected—and I pray it will not be rejected—tomorrow will be like yesterday. There is no critical program that I know of for the United States to indulge in an extensive atmospheric testing program. The only assurance we have is that the President of the United States said we will not test in the atmosphere unless the Russians do so first. That is the only assurance we now have. We have before us an agreement that neither side will do it.

We must realize that we have been at this task of negotiating a treaty since 1958. I ask my colleagues in the Senate, who has been the moving party in this

endeavor? Were these talks initiated at the suggestion of Stalin or Khrushchev, or were they initiated at the suggestion of Eisenhower and Kennedy? The best rationale that Senators who have talked against the treaty on the floor can use in reaching a conclusion is that we should have never gotten into this situation in the first place. What they are actually saying is that everything that was started in October 1958, was wrong, that everything we have done since has been wrong, and that what we have now is wrong. That is their argument. With all due respect to their sincerity and their dedication and patriotism, I cannot agree.

A rejection of the treaty would be an invitation to unrestricted atmospheric testing or increasing radioactive pollution of the atmosphere. That is all it can mean. What we are discussing is atmospheric testing. While scientific evidence indicates that the dangers of fallout today have not reached the critical point, the fact remains that continued further testing at the same or greater rate, even without a nuclear war, could constitute a serious problem.

Strontium 90 has a half-life of 28 years.

When I was a little boy, we used to play a game. We would throw a ball into the air and shout, "What goes up, must come down." When strontium 90 is shot into the air, it will come down. When it rains, the rain will gather it and bring it down. The atmosphere can absorb only so much. True enough, what is up there now has not reached the danger point. The more that is shot up, the more will be up there; and the more that is up there, the more that will come down here. Remember the song: It goes in there, and it comes out here? Once we have passed the point of no return, we will not send any chimney sweeps up there to sweep the strontium 90 away. It will be there. It will be there to plague the destiny of mankind for years to come.

I am not trying to alarm anyone by saying for a moment that we have already reached the danger point. But if we are to exercise the privilege of testing in the atmosphere, and if Russia will exercise the privilege of testing in the atmosphere, and if Great Britain will exercise the privilege of testing in the atmosphere, and then De Gaulle, Mao Tse-tung, Israel, then Egypt, and then some other countries, who will stop the testing then?

The time to stop it is now. That is why we are a party to the treaty. Let us stop atmospheric testing now; otherwise it could be too late.

Moreover, a rejection of this treaty by the U.S. Senate would signify to the world that the long hoped for first step toward the control of nuclear weapons still evades us. What the motive of Khrushchev may be in accepting this document I cannot say. For my part, the question is: Is this treaty in the interest of the United States of America and the free world? My answer is unequivocally, "Yes." From the very start, we have been the moving party. It was President Eisenhower who initiated this effort. It was President Kennedy who pursued it. We were the ones who took the initiative. As far as I am concerned, the treaty is the product of our effort. It is an American treaty, signed by an American Secretary of State.

I was present and had the honor to stand behind the Secretary when he signed it—and it was recommended to the Senate by the President of the United States. So far as I am concerned—and I shall shout this from the rooftops—this treaty is good for us, it is good for our families, it is good for our children, it is good for America. The treaty is good for the free world; it is good for all mankind.

Of course, risks are involved. There has not been an individual of any responsibility who has not admitted from the very start that risks are involved. But how much greater are the risks if we reject this treaty and, if rejected, then the crucial question would be: Where will we start all over again?

What will be the prestige and position of the United States in the face of over 90 nations which have now become parties to a treaty that is the product of our effort? How can we stand here at this moment retreating, rejecting, and repudiating what we have been trying to achieve for the last 5 years?

I ask these questions with a prayer on my lips: What would we do the week after we had rejected the treaty? What would the President do? What would the Secretary of State do? Where would we begin new talks? What would we say to the 90 nations that have signed the treaty—a treaty that we initiated, a treaty that we inspired, a treaty that we have worked for?

As I have previously stated, those who doubt the treaty have a double responsibility and a double power under our constitutional process. For every Senator who votes against the treaty—and I do not challenge or question any Senator's right to do so—the President must produce two Senators who will believe in him. That is how serious the situation is.

I realize that it is a foregone conclusion that the minds of Senators are made up. That has been evident from the very start. One can tell it from the number of Senators in the Chamber. They have lived with this subject. They have studied it and have read the RECORD. Their minds are made up. All we are doing is making our speeches for the RECORD. I really made mine the other day, regretfully on the time of the distinguished Senator from Minnesota [Mr. HUMPHREY]. I am making this formal statement merely to document the RECORD. I feel I am obliged to do so because I owe a responsibility to the Senate as Chairman of the Joint Committee on Atomic Energy. But really I am not adding any new argument. All the arguments have been made, and made very clearly. One could not invent a new idea or a new argument; they have all been made.

Mr. FULBRIGHT. Mr. President, will the Senator yield?

Mr. PASTORE. I yield.

Mr. FULBRIGHT. I should like to protest the last statement. The Senator from Rhode Island is delivering a wonderful, masterly speech. I regret that more Senators are not in the Chamber to hear it. It is one of the great speeches being made. I do not accept the Senator's characterization that it is a formal speech.

Mr. PASTORE. Besides being a great scholar, the distinguished Senator from Arkansas is a generous gentleman. I appreciate his compliment.

I have lain awake nights thinking about the treaty. I have pondered the testimony of the great experts who have come before our committee to tell us what they think of the treaty, of the destructive capabilities of atomic weapons, and of the capabilities of the Russians.

But as God is my judge, my task at this final moment is an easy one. My work has not always been easy. The decisions we have had to make as members of the Joint Committee have been quite strenuous and hard. I have lived with this problem and peril from the very start. I have followed our country's efforts year by year and step by step. With each failure, I have suffered a feeling of frustration; and every time the encouragement came from the President to resume the talks, I found new hope.

We have now accomplished what we have been trying to accomplish.

I am reminded of a young man who courted a girl for 5 years. Once a day he asked the girl to marry him. Every day he asked her to marry him. She would not give him an answer. Finally, after the 5 years, when he asked her again, she said, "Yes." And then he thought he had made a bad bargain.

We have tried for 5 years to obtain this treaty. Now we have accomplished what we started to accomplish. I do not believe that we have made a bad bargain. We have made a good one. This is a good opportunity, a golden opportunity, that has come to all humanity. It would be the greatest tragedy of our time to reject the treaty. It is the biggest thing that has happened to civilization since that day in December 1942 when Enrico Fermi found the secret to the atomic bomb. It is the biggest thing that has happened since December 2, 1942, when Fermi achieved the first nuclear chain reaction under Stagg Stadium, at the University of Chicago.

The treaty is only a first step, but it is the only step we have been able to take in the direction of achieving some sort of control, even so small, of the destructive force of atomic power. Whether this opportunity will ever come again, only God knows; but I sincerely believe this is our opportunity. I pray we shall not allow it to pass unheeded, unappreciated, and unaccepted. With all the reverence in my heart and with all the reverence of my being, I say, in utmost sincerity, let us accept this treaty, let us approve it, and let us give humanity a second breath.

Mr. FULBRIGHT. Mr. President, will the Senator from Rhode Island yield?

Mr. PASTORE. I am glad to yield.

Mr. FULBRIGHT. I cannot resist thanking the Senator from Rhode Island